

**Anna Zhen**  
annazhen@iu.edu

## EDUCATION

---

**New York University**, B.A. Summer 2011-Spring 2015  
Major: Psychology  
Minor: Child Adolescent Mental Health Studies

**The University of Chicago**, M.A. Social Sciences Fall 2016-Summer 2017  
Psychology Concentration  
Thesis Title: “*Manual Directional Gestures for Pitch Facilitate Learning of Mandarin Tones*”

**Indiana University**, Ph.D. Psychological and Brain Sciences Fall 2018-Present  
Cognitive Neuroscience Concentration

## HONORS

---

Dean’s List for Academic Year Fall 2012-Spring 2013  
Dean’s List for Academic Year Fall 2014-Spring 2015

## FELLOWSHIPS AND GRANTS

---

Banco Santander Scholarship (\$3,000) Fall 2013  
NYU Internship/Research Funding Award (\$750) Summer 2014  
ASPIRE Funding Award from the Office of Vice Provost for Faculty, Arts, Humanities, and Diversity (\$1,500) Fall 2014-Spring 2015

## RESEARCH BACKGROUND

---

**Cognition Action Neuroimaging Lab of Dr. Karin James** Fall 2018-Present  
*Graduate Student Researcher*

I am studying the role of gestures training in speech perception and production using behavioral and neuroimaging methods. Along with Dr. Karin James (Indiana University), Dr. Susan Goldin-Meadow (University of Chicago), and Dr. Xing Tian (NYU Shanghai) we are examining the behavioral and neural factors in gestures that help participants to distinguish between novel phonemes and to enunciate these novel phonemes like a native speaker. In general, we are examining multisensory integration in learning, speech, and language.

**Speech Language and Neuroscience Group of Dr. Xing Tian** Summer 2015- Summer 2018  
*Research Associate*

I created and piloted a study on pitch gestures and learning of novel phonemes at NYU Shanghai (Summer 2015- Spring 2016): I independently recruited, ran participants for the study, and wrote a MATLAB script to analyze behavioral data from the study. Next, I examined the neural mechanisms of gestures training for the perception of novel phonemes. I created and standardized auditory and video stimuli for the study, designed an experiment to investigate this question using fMRI, and programmed the study on MATLAB (Fall 2017). I recruited and ran fMRI experiments on participants with varying levels of knowledge of Mandarin Chinese in Shanghai, China (Spring 2018). Along with a team of researchers at NYU Shanghai and the University of Chicago, we are currently analyzing the data for increased functional connectivity as a result of pitch gestures training.

**Goldin-Meadow Lab of Dr. Susan Goldin-Meadow** Fall 2016-Summer 2017  
*Graduate Research Assistant*

I created, designed, conducted, and wrote a behavioral study that examined multimodal integration for speech perception (Fall 2016-Summer 2017). Along with researchers at University of Chicago and NYU Shanghai, we examined the extent that gestures training that

consists of training with one modality (auditory), two modalities (auditory and visual), or three modalities (auditory, visual, and motor) facilitated learning of the Mandarin tonal categories. I managed communication between researchers at the University of Chicago and NYU Shanghai for this project. I wrote an IRB for the study to be conducted at the University of Chicago. I also prepared the data to be analyzed using a general linear model. In addition to this primary research project, I also coded gestures for a study on learning the abacus to establish inter-rater reliability. I also collaborated with Dr. Goldin-Meadow on the fMRI project at Dr. Tian's lab in NYU Shanghai (Fall 2017-Summer 2018).

**CDSC Lab of Dr. Marjorie Rhodes**

Summer 2014-Spring 2015

*Undergraduate Research Assistant*

I recruited parents and their child at the Children Museum of Manhattan and helped conduct a parent-child communication study to examine how parents communicated moral behaviors with their child. I analyzed the data, presented the study at the NYU Undergraduate Research Conference, and wrote the study for an independent studies course at NYU.

**FTRG Lab of Dr. Richard Heyman and Dr. Amy Slep**

Summer 2014-Spring 2015

*Undergraduate Research Assistant*

I recruited patients, recorded patients and their dentist's interactions during a dentist appointment, and conducted an experiment following their appointment. I also administered surveys to potential foster parents for the New York Foundling Project, and recruited high school students to participate in a study that examined dating relationships among teenagers.

**LINC's Project at NYU Langone Medical Center**

Spring 2014

*Volunteer/Intern*

I conducted clinical tests and interviews (KTEA, ECELL, BASC, and HTKS) with elementary school students for the Latinos in Context Project.

**ACADEMIC TEACHING BACKGROUND**

---

**P442: Infant Development**

Fall 2018

*Teaching Assistant for Dr. Bennett I. Bertenthal*

I graded students' weekly summary papers on infant development research articles. I made revisions to their summaries as well as met with them to improve their critical thinking skills. I also meet with the students to suggest ways to improve their writing.

**P349: Cognitive Neuroscience**

Fall 2018

*Teaching Assistant for Dr. Karin James*

I met with students to facilitate learning and understanding of cognitive neuroscience topics: brain structure and function, cognitive neuroscience methods, visual processing, object recognition, memory, language, and emotion.

**PSYCH-UA 1: Introduction to Psychology**

Spring 2015

*Teaching Assistant for Dr. Edgar Coons*

I led a weekly recitation section where I presented, discussed, and reviewed psychology topics: the brain and nervous system, sensation, perception, learning, memory, development, social psychology, and psychopathology. I also co-lead review sessions for above topics to help undergraduates prepare for exams.

**WORK EXPERIENCE**

---

**1. Excel Learning Center at Brooklyn, NY**

Summer 2018

*Reading, Writing, and Math Teacher*

**2. Elite Reader Academy at Shanghai, China**

Fall 2017-Spring 2018

*English Teacher and Curriculum Developer*

<b>3. Pui Tak Center at Chicago, IL</b> <i>English Teacher to immigrants and new Americans</i>	Summer 2017
<b>4. Excel Learning Center at Brooklyn, NY</b> <i>Math Teacher</i>	Summer 2016
<b>5. Scholar Tree/ New Pathway at Shanghai, China</b> <i>English Teacher and Curriculum Developer</i>	Summer 2015-Spring 2016
<b>6. First Chinese Presbyterian Church at New York, NY</b> <i>Test Prep Teacher</i>	Fall 2013-Spring 2014
<b>7. Stepping Stones at Shanghai, China</b> <i>English Teacher</i>	Fall 2013
<b>8. New York University Shanghai at Shanghai, China</b> <i>Peer English Tutor and Academic Support</i>	Fall 2013
<b>9. NYU America Reads at New York, NY</b> <i>Literacy Tutor</i>	Fall 2011-Spring 2014

## **PUBLICATIONS**

---

**Zhen, A.,** Hedger, S. V., Heald, S., Goldin-Meadow, S., & Tian, X. (2019). Manual directional gestures facilitate perceptual learning. *Cognition, 187*, 178-187.

Zhang, W., **Zhen, A.,** Liang, B., & Mo, L. (2019). The parallel mechanism of semantic context influences and parafoveal word identification. *Neuroscience Letters*, in press.

**Zhen, A.** (2016). A review on the negative effects of seemingly positive stereotyping of Asians and Asian Americans on their academic performance and health. *NYU Psi Chi Journal of Psychology Review, 1*, 23-26.

## **CONFERENCE PRESENTATIONS**

---

**Zhen, A.,** Hedger, S. V., Heald, S., Goldin-Meadow, S., & Tian, X. (2019). Manual directional gestures facilitate learning of Mandarin tones. Midwestern Psychological Association, Chicago, Illinois.

**Zhen, A.,** Hedger, S. V., Heald, S., Goldin-Meadow, S., & Tian, X. (2017). Manual directional gestures facilitate learning of Mandarin tones. Society for the Neurobiology of Language, Baltimore, Maryland.

**Zhen, A.,** Chalik, L., & Rhodes, M. (2015). The influence of group membership on parent-child conversations about helpful and harmful behaviors. NYU undergraduate research conference, New York City, New York.

## **COMMUNITY OUTREACH**

---

<b>1. SciU at Indiana University</b> <i>Academic Blog Writer</i>	Fall 2018- Present
<b>2. Science Fest at Indiana University</b>	Fall 2018

## **PROFESSIONAL AFFILIATIONS**

---

<b>American Scientific Affiliation</b>	Fall 2018-Present
<b>Midwestern Psychological Association</b>	Fall 2018-Present
<b>Psi Chi, The International Honor Society in Psychology</b>	Fall 2014-Present
<b>Psychological Sciences</b>	Fall 2017-Fall 2018
<b>Society for the Neurobiology of Language</b>	Spring 2017-Spring 2018